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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/349,713	07/08/1999	HERWIG BUCHHOLZ	MERCK-1900	7039

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EXAMINER

SHARAREH, SHAHNAM J

ART UNIT PAPER NUMBER

1619

DATE MAILED: 01/22/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/349,713

Applicant(s)

BUCHHOLZ ET AL.

Examiner

Shahnam Sharareh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 12-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 12-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Amendment filed on November 8, 2001 has been entered. Claims 1-10, and 12-14 are pending.

The Affidavit filed on February 15, 2001 under 37 CFR 1.131 has been considered and is found effective to overcome the 35 U.S.C. 102(a) as being anticipated by Beirsdorf AG DE 19753983 (abstract) and 35 U.S.C. 102(e) as being anticipated by Gers-Barlag et al US Patent 5,952,39. The translation of German Application No. 19809304 submitted on November 8, 2001 is sufficient evidence to establish conception, diligence, or reduction to practice from a date prior to the date of reduction to practice of the cited references. Accordingly, said rejections are withdrawn.

Response to Amendment and Arguments

Any rejection that is not addressed in this Office Action is considered obviated in view of the Amendment.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-7 stand rejected under 35 U.S.C. 102(b) as being anticipated by JP 06183940.

Applicant's arguments with respect to this rejection have been fully considered but are not found persuasive. Applicant argues that JP 06183940 does not teach the combination of isoquercitrin with other components of the instant pending claim 1 such as miricitrin and isohamnetin.

In response, Examiner draws Applicant's attention to the attached computer generated translation of JP 06183940. Accordingly, the abstract of JP 06183940 clearly states a composition characterized by compounding one or more of flavonol compounds selected from isoquercitrin, myricitrin (different spelling for miricitrin), and isorhamnetin (see abstract). Moreover, claim 1 of the cited reference recites compositions containing one sort or two sorts or more of flavonols chosen out of an isoquercitrin, a millicitrin and an isorhamnetin (see translated copy claim 1). Therefore, JP patent anticipates the limitations of the instant claims.

Claims 1-10, 12-14 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Lanzendorfer et al WO 96/18381 in view of Bean US Patent 4,132,782 .

Applicant's arguments with respect to this rejection have been fully considered but are not found persuasive. Applicant argues that Bean does not identify isoquercitrin as the active agent of the extract from mountain ash berries. Applicant further asserts that Lanzendorfer's teachings is broad with respect to specific combination of isoquercitrin and the secondary components as set forth in the instant claim 1, and that there is no specific direction towards the instant combination.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In the instant case, the issue is not whether Bean identifies isoquercitrin as the active agent nor is it that Lanzendorfers' teachings are broad with respect to the instant

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combination of compounds. Rather, the issue revolves around whether there is reasonable expectation of success that the cited prior art can be modified or combined to reject claims as *prima facie* obvious (see MPEP 2143.02).

In the instant case, as set forth in the previous Office Action, one of ordinary skill in the art would have had a reasonable expectation to succeed in improving the antiviral activity of Lanzendorfer's topical compositions when combining them with the compositions taught by Bean. Lanzendorfer et al disclose the use of flavonoid containing compositions for topical use in combination with various vitamins, other flavone and UVB or UVA filters (see abstract, page 3-5, 43, 54-60, claims 1-7). Lanzendorfer further teach the use of suitable flavones from commercially available flavonoid containing plant extracts with his compositions (see page 43). Lanzendorfer even teaches the use of isoquercetin derivatives such as alpha-glycocyloisouercetin (claims 1-3) in their compositions (for Applicant's convenience attention is drawn to US Patent 5,952,373, the US equivalent of WO 96/18381; col 5-6; col 17, lines 50-65; claims 2-4). Therefore, there is suggestion by Lanzendorfer to combine flavone compositions.

Bean's composition, on the other hand, is a flavone containing composition comprising isoquercitrin and is used topically as an antiviral agent (see col 4). Therefore, the teachings of Bean and Lanzendorfer are analogous. Moreover, the antiviral properties of flavonoid containing compounds such as isoquercitrin are well described in the art. Thus, even though, Lanzendorfer does not explicitly combine isoquercetin with a second flavone, it is *prima facie* obvious to combine Lanzendorfer's

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compositions with Bean's compositions to form a third composition for their known intended use, because the idea of combining them flows logically from their having been individually taught in the prior art." In re Kerkhoven, 626 F.2d 846, 205 USPQ 1069, 1072 (CCPA 1980). Accordingly, claims 1-10, and 12-14 stand rejected.

Conclusion

No claims are allowed. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shahnam Sharareh, PharmD whose telephone number is (703) 306-5400. The examiner can normally be reached on Monday to Friday from 8:30 a.m. to 5:00 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diana Dudash can be reached on 703-308-2328. The fax phone number for this Group is 703-308-4556. Any inquiry of a general nature of

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relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is 703-308-1235.

sj 1/15/2002

RUSSELL TRAVERS
PRIMARY EXAMINER
GROUP 1200